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Derwent Record

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Derwent Title: Hydrophilising agent for synthetic fibres, esp. acrylonitrile - contains polymeric pyrrolidinium salt, ethoxylated betaine cpd and ethoxylated sulphobetaine sulphinate or sulphonate

Original Title: ☒ [DE4316666C1](#): Hydrophilierungsmittel

Assignee: MAERKISCHE FASER PREMnitz AG Non-standard company
 BALLSCHUH D Individual
 ENGELBRECHT L Individual
 OHME R Individual
 SEIBT H Individual

Inventor: BALLSCHUH D; ELLMANN R; ENGELBRECHT L; OHME R; SCHMIDT B; SCHOENING K; SEIBT H;

Accession/Update: 1995-007368 / 199502

IPC Code: D06M 15/356 ; C04B 16/06 ; D06M 13/244 ; D06M 15/53 ;

Derwent Classes: [A87](#); [E16](#); [F06](#); [L02](#); [A14](#);

Manual Codes: [A04-B](#)(Others) , [A04-D02B](#)(Fibres, textiles) , [A08-S02](#) (Solvents; swelling agents) , [A08-S08](#)(Absorption agents; repellance agents) , [A10-E01](#)(General) , [A12-S05S](#)(Antistatic, surfactant, softener or lubricant treatments) , [E10-A09B8](#)(no ring(s) present) , [E10-A22D](#)(No Aromatic ring - with acid (derivative)) , [F01-D02](#)(Acrylic and modacrylic fibres) , [F03-D04](#)(Fabric structures designed for reinforcement of solid materials) , [L02-D05](#)(Reinforced and pre-stressed concretes)

Derwent Abstract: ([DE4316666C](#)) A hydrophilising agent (I) for the treatment of synthetic fibres, esp. reinforcing and process fibres based on polyacrylonitrile (PAN) for use in hydraulic binders, comprises (A) 4-12 wt.% polymeric pyrrolidinium salt, (B) 4-13 wt.% ethoxylated alkyl- or dialkyl-ammonium betaine and (C) 4-7 wt.% alkyl-bis-(polyoxyethylene)-ammonium-sulphobetaine sulphinate and/or sulphonate as main components in the mole ratio 1:1:1, together with (D) 1-5 wt.% non-ionic surfactant, (E) 5-10 wt.% low-mol. wt. alcohol or diol, (F) 0.05-2 wt.% foam inhibitor and (G) 0.05-2 wt.% auxiliary film former, made up to 100 wt.% with water.

Use - Used esp. for the modification of PAN fibres for use as reinforcement in building materials, friction linings, etc.

Advantage - Enables the hydrophilic properties of synthetic fibre to be modified independently of the intended matrix (cement, etc.). The hydrophilising film is deposited from dil. aq. soln. as a complex which can then form a silicate film which also protects the fibre surface from the alkali in the binder.

[Dwg.0/0](#)

Family: PDF Patent Pub. Date Derwent Update Pages Language IPC Code
☒ [DE4316666C1](#) * 1994-12-08 199502 6 German D06M 15/356

Local appl.: [DE1993004316666](#) Filed:1993-05-13 (93DE-4316666)

 **INPADOC**
Legal Status:

[Show legal status actions](#) **First Claim:**


[Show all claims](#) 1. Hydrophilierungsmittel zur Ausrüstung von Synthesefasern für technische Einsatzgebiete, insbesondere von Armierungs- und Prozeßfasern auf Acrylnitrilbasis, für den Einsatz in hydraulischen Bindern, bestehend aus
 4 bis 12 Gew.-% eines polymeren Pyrrolidiniumsalzes,
 4 bis 13 Gew.-% eines oxethylierten Alkyl- oder Dialkylammoniumbetains sowie
 4 bis 7 Gew.-% eines Alkyl-bis(polyoxyethylen)-ammoniumsulfobetain-sulfonats und/oder -sulfobetain-sulfonats als Hauptkomponenten und
 1 bis 5 Gew.-% eines nichtionischen Tensids,
 5 bis 10 Gew.-% eines niedermolekularen Alkohols oder Diols,
 0,05 bis 2 Gew.-% eines Schauminhibitors,
 0,05 bis 2 Gew.-% eines unterstützenden Filmbildners und Ausgleich auf 100 Gew.-% mit Wasser, wobei die Hauptkomponenten im Molverhältnis 1 : 1 : 1 vorliegen.

 **Priority Number:**


Application Number	Filed	Original Title
DE1993004316666	1993-05-13	HYDROPHILIERUNGSMITTEL

 **Chemical**
Indexing Codes:

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 **Markush**
Compound
Numbers:

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 **Extended**
Polymer Index:

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Accession Number	Type	Derwent Update	Derwent Title
C1995-002685	C		
1 item found			

 **Title Terms:**

HYDROPHILIC AGENT SYNTHETIC FIBRE ACRYLONITRILE CONTAIN
 POLYMERISE PYRROLIDINIUM SALT ETHOXYLATION BETAIN COMPOUND
 ETHOXYLATION SULPHINATE SULPHONATE

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